

KEYSPAN ENERGY DELIVERY NEW ENGLAND  
D.T.E. 01-105

FOURTH SET OF INFORMATION REQUESTS OF THE  
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY TO  
KEYSPAN ENERGY DELIVERY NEW ENGLAND

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Pursuant to 220 C.M.R. § 1.06(6)(c) the Department of Telecommunications and Energy (“Department”) submits to KeySpan Energy Delivery New England (“KeySpan” or the “Company”) the following Information Requests. The instructions contained in the Department’s First, Second and Third Sets of Information Requests apply to these Information Requests.

**Questions**

- D.T.E. 4-1 Please refer to (1) the Company’s response to D.T.E. 1-77; (2) pages 48, 51 and 54 of the Company’s filing; (3) Charts III-B-5, III-B-12, III-B-13, and III-B-15 of the Company’s filing; and (4) pages 37 and 43 of Appendix A to the Company’s filing.
- (a) Please clarify what (i) residential or (ii) commercial switch rate or rates were used from the XENERGY report in generating (1) residential, (2) apartment, and (3) commercial/industrial annual load additions under (a) base case, (b) high demand case, and (c) low demand case economic conditions.
  - (b) Please explain how the switch rates were incorporated into total net annual load additions for 2002 to 2006.
  - (c) If the prices of natural gas and heating oil tend to track each other in the long run and the Company did not vary fuel prices when it developed its low-demand and high-demand scenarios, please explain why the Company performed the exercise of forecasting switch rates as a function of oil and gas prices, and how the Company used the results of that exercise.
- D.T.E. 4-2 Please refer to the Company’s response to D.T.E. 1-79. Please state how XENERGY explains its selection of the oil/gas price ratio as the composite explanatory variable, rather than (1) the inverse of the oil/gas price ratio, (2) the difference between the oil price and the gas price, or (3) any other composite explanatory variable expected to have a relationship to the residential gas heating switch rate.

D.T.E. 4-3 Please refer to the Company's response to D.T.E. 1-82 and to Appendix A, pages 36 and 37, of the Company's filing. The Company has indicated its belief that there are too few data points to use statistical regression.

- (a) Please provide any known example(s) from published or unpublished sources of the analytical method used here by XENERGY (i.e., taking the spread in one variable and dividing it by the spread in another variable, then identifying that ratio as the slope of a linear relationship beheld in a scatter plot).
- (b) Please state what each of the two points defined by x,y coordinates (0.77, 3146) and (0.95, 4239) represents.
- (c) Please indicate whether the ratio of the spread in one variable to the spread in another variable is the slope of a diagonal of the smallest rectangle enclosing all data points in a scatter plot (that is, smallest among rectangles orthogonal to the axes of the scatter plot).
- (d) How does the XENERGY Project Team justify its non-traditional selection of a diagonal of the smallest rectangle enclosing all data points in a scatter plot to represent a relationship between two variables, x and y?
- (e) How does the XENERGY Project Team justify selecting the points with x,y coordinates (0.77, 3146) and (0.95, 4239) to generate a line representing the relationship of oil-to-gas price ratio to switching rate?
- (f) Please indicate, for the each of the following three example sets, the equation in the form  $y = mx + b$  that the XENERGY Project Team would generate in order to best explain or predict variable y based on variable x; please explain the reasoning in each case. Three hypothetical data sets, each representing the x,y coordinates of five data points, are: {a: (1,3), (3,1), (3,3), (3,5), (5,4)}; {b: (1,2), (2,1), (3,3), (4,5), (5,4)}; {c: (1,5), (2,1), (3,3), (4,2), (5,4)}.

D.T.E. 4-4 Please refer to the Company's response to D.T.E. 2-9.

- (a) Please provide a detailed description of the methods the Company uses to determine whether the Company's distribution system is adequate to meet customer requirements.
- (b) Please identify the geographic areas for which the Company is alert to potential future needs for gas distribution capacity reinforcements.
- (c) Please provide a copy of the Company's most recent annual review of the adequacy of its distribution system.

- D.T.E. 4-5 Please refer to the Company's response to D.T.E. 2-35, and to pages 95 to 110 of the Company's filing. For contracts listed on pages 96 to 109, please provide information similar to information that was provided in response to D.T.E. 2-35 for contracts listed on page 95. Also, please provide analogous information for contracts listed on page 110.
- D.T.E. 4-6 Please refer to the Company's response to D.T.E. 3-3, and to page 98 of the Company's filing. For contract #100015, please verify whether the delivery point is at Oakford, PA, as suggested by the Company's filing, or at Leidy, PA, as stated in the response to D.T.E. 3-3. Similarly, for contract #700049, please verify whether the delivery point is the Oakford Interconnection or the Chambersburg Interconnection.
- D.T.E. 4-7 Please provide a copy of the Company's 2001 fiscal year S.E.C. Form 10-K.